

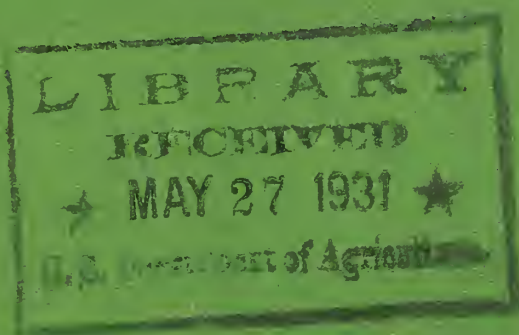
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Received
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Forest Division

1928/29

Evergreen Trees



For



*Forest and
Ornamental
Planting*

A Guide to Planting



On the following pages will be found information of a helpful nature to those interested in planting coniferous trees for reforestation, water-shed protection or ornamental purposes. Details relative to the planting of Christmas Trees for commercial markets are also included.

When to Plant ∞

Best results will be obtained by planting in the spring as soon as the frost is out of the ground. At this time, the roots become firmly established while there is plenty of moisture in the ground. Summer months afford an opportunity for the trees to become thoroughly rooted before the winter months set in.

Fall planting can often be done with success, but it is usually a gamble. Lack of moisture in the ground and heaving of the trees by frost, before the roots become firmly set, is fatal to the small trees.

What to Plant ∞

FOR FOREST PLANTING —

White Pine

Red Pine

Scotch Pine

White Spruce

Norway Spruce

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BROWN
Company

FOUNDED 1852

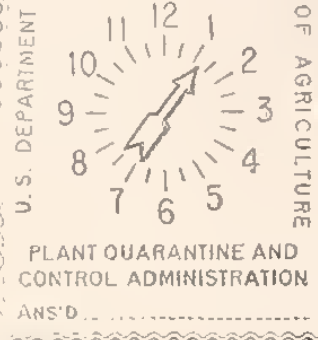
*Portland, Maine*

PLEASE ADDRESS

BROWN COMPANY CUPSUPTIC NURSERY
OQUOSSOC, MAINE OR BERLIN, N. H.*Handwritten signature in blue ink.*

September 1, 1928, RECEIVED

SEP 4 1928

U. S. State Dept. of Agric.
Federal Horticulture Board
Washington, D. C.

Gentlemen:

As a guide to your efforts in the raising and marketing of coniferous trees, we are supplying you with the enclosed pamphlet. Price lists giving species available for fall 1928 and spring 1929 are included.

With a favorable growing season just finished, we are now in a position to offer you a fine crop of healthy young trees, well suited for ornamental, or reforestation purposes.

It will be to your advantage to make immediate inquiry relative to any item in which you may be interested. Certain species of our stock are limited and all orders are subject to prior sale.

We are so situated that we can take orders for future deliveries, and grow any of the Northern species according to specified requirements.

If you require more definite information, do not hesitate to write us. We will gladly help you with your problems and send along sample trees for your inspection. You are, furthermore, invited to make a personal inspection of the stock at the nursery, situated on the shore of Cupsuptic Lake four miles from Oquossoc, Maine.

Yours very truly,

BROWN COMPANY NURSERY

Oquossoc, Maine.

K:G

FOR CHRISTMAS TREES —

Balsam Fir
White Spruce
Norway Spruce

FOR WATER-SHED PROTECTION —

Any of the conifers

FOR ORNAMENTAL PLANTINGS —

Colorado Blue Spruce
Engelmann Spruce
Arborvitae
Douglas Fir
Mugho Pine
Austrian Pine
Norway Spruce
White Spruce
Balsam Fir

What to Plant (Soils)

IN DRY SANDY SOILS —

Red Pine
Scotch Pine
Jack Pine

IN MOIST OR SANDY LOAM —

White Pine
Red Pine
Scotch Pine
Norway Spruce

Arborvitae
Colorado Blue Spruce
Mugho Pine
Austrian Pine
Engelmann Spruce

IN MOIST LOAM OR CLAY LOAM —

White Spruce
Norway Spruce
White Pine
Balsam Fir
Arborvitae

What to Plant (Shade)

IN DENSE SHADE —

White Spruce
Norway Spruce
Engelmann Spruce
Arborvitae
Balsam Fir

IN PARTIAL SHADE —

White Pine
Colorado Blue Spruce
Scotch Pine

IN FULL LIGHT —

Red Pine



Care of Stock Upon Arrival

Trees should be promptly unpacked upon arrival. If they are not to be set out at once they should be *Heeled-In*. Dig a trench of sufficient depth to accommodate the roots in an upright position without crowding. In this position, cover the roots with dirt, packing it firmly. Keep the roots moist at all times, and when heeling-in, be sure not to crowd the bunches, as this will cause the trees to heat. Trees are usually received from the nursery tied in bunches of 25 to 100 trees, depending upon their size. To facilitate handling, the trees should be left in bundles until needed for planting. Trees should be heeled-in in a place where they will be protected from sun and drying winds.

An old shed without a floor is an ideal place for heeling-in. If this is not available, a shady place in the open well protected can be used. Trees can often be kept in good condition for two or three weeks, by this method. The sooner, however, that trees can be planted, the better, as heeling-in retards their growth somewhat.

Too much emphasis cannot be placed on keeping the roots of conifers constantly protected. In every step of handling, the roots should be kept moist and at no time should they be allowed to become dry.

A Guide to **Forest Planting**

Size of Trees

Either three or four year old transplants are best adapted to reforestation purposes. Transplants are trees that have been grown in seedbeds for two years and then transplanted. In the transplant beds, these seedlings are spaced and carefully weeded. They have more fertilizer available, and the roots have an ideal place in which to develop, as the soil is kept loose by cultivation.

Three year old transplants generally average from 3" to 5" in height, while four year old transplants generally average from 5" to 10". Except in the most ideal locations, four year old transplants are preferred because —

1. The trees are larger, roots are better developed and the trees better proportioned as to roots and tops.
2. The extra years of growth in the transplant beds, often amounts to more than the first three years growth after the tree has been planted in the forest. Thus, valuable time is saved in raising the forest crop.
3. The larger size of the tree better enables it to combat weeds, hardwood bushes and other impediments in its struggle for existence.

How to Plant ~

Standard planting distance is usually six feet each way. Theoretically, 1200 trees would be used per acre, but due to rocks, stumps and the rough topography of the ground, not more than 1000 trees are usually used.

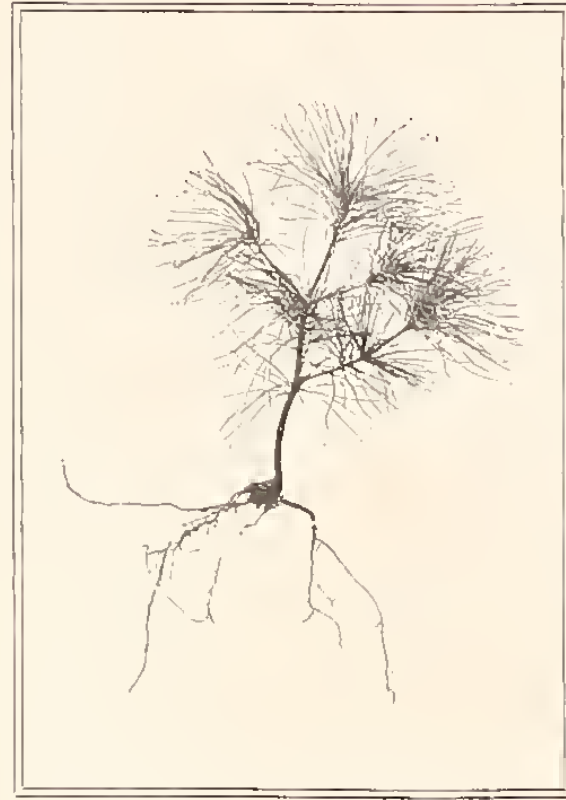
Since trees are usually allowed to shift for themselves after they are in the ground, they should be given a good start by careful planting.

Two men comprise a crew. A grub hoe or mattock is used for making the holes in which the trees are set. One man using the grub hoe takes the duff, or sod, off a space about 12" square. Then driving his hoe to the hilt in the center of this space he makes a hole for the insertion of the tree. The second man follows the first. He carries a pail which holds the trees with their roots immersed in about one inch of muddy water. He places a tree in the hole made by the first man and firmly stamps the soil around the tree, so that the roots are in close contact with the soil and the tree firmly held. Care should be used in keeping the roots well spread out and not doubled back so they will come close to the surface. Spacing between trees is determined by the man with the grub hoe, who paces out the correct distance. Stakes are used on each side of the lot to insure the rows being kept straight.

Compare these Illustrations



A four year old White Pine tree grown at the Brown Company Cupsuptic Nursery, Oquossoc, Maine



A four year old, forest grown White Pine tree. Note scragginess of foliage and root system.

MANY people do not appreciate the difference between a nursery-grown pine tree and one that is forest grown. These illustrations are from actual photographs. The tree at the left, a White Pine, was grown at the Brown Company, Cupsuptic Nursery and is exactly the same age as the tree on the right, which is a four year old forest-grown product. Note the difference in size and particularly the root system. Proof enough that Nursery-grown trees are superior.

After a little practice, two men should plant 1000 trees a day on average ground, and do the work well.

Probable Yield ∞ *

“Not many figures are available concerning yields from plantations. A study of older plantations in Massachusetts a number of years ago revealed that some of these had made very good growth. Yields per acre of 17,000 B. F. in 36 years — 24,000 B. F. in 39 years — 32,000 B. F. in 46 years — and 44,000 B. F. in 60 years are recorded in White Pine plantations. A mixed 48 year old stand of White Pine and Norway Spruce contained 33,000 board feet per acre. Given good care in fair soil in their native region, the more valuable species of conifers should yield 10,000 to 25,000 board feet to the acre at an age of 50 years, in many cases a great deal more.”

* From Farmers' Bulletin #1453. By C. R. Tillotson.



A Guide to **Christmas Tree Planting**

Size of Trees ∞

Four year old transplants are most generally used for Christmas Tree Planting. This size tree requires less weeding and is as easily set out in a plowed furrow as the smaller trees.

Correct Spacing ~

Trees for Christmas Tree Planting are usually spaced four by four feet to enable cultivation, 2,700 trees being planted to the acre.

How to Plant ~

In planting Christmas Trees, the ground is usually prepared as for any field crop. Then the field is furrowed out in each direction with a one-horse shovel plow. Furrows are spaced about four feet apart. This allows for cross cultivation with a horse for the first two years and hence cuts hand weeding to a minimum. Trees are planted by two men; one man carrying the trees in a pail and placing them in an upright position at the intersection of the furrows, while the second man, using a garden hoe, places the dirt around the roots of the tree, firmly stamping it down with his feet. Two men should plant better than an acre a day, or 2,700 trees, after the ground is furrowed.

Christmas Tree Planting as a Future Crop ~

Many farmers are finding it worth their while to plant Christmas Trees as a future crop. The general practice being to plant trees 4 years old and to cut them after 5 to 8 years. The following figures were prepared by the University of New

Hampshire some years ago, and have been corrected to meet present conditions. They are cited for what they may be worth, but not guaranteed.

Planting Balsam Fir, spaced four by four feet, 2,720 trees per acre.

Costs per Acre:

2,720 trees, Balsam Fir 4 year transplants @ \$20.00 per M . . .	\$ 54.40
Freight	10.00
Plowing and Fertilizer	30.00
Planting 2½ man days @ \$4.00 . . .	10.00
Cultivating	10.00
Int. on \$105.00, 7 years @ 6% . . .	52.92
Total cost per acre	\$167.32

Receipts:

2,448 trees @ \$.30 each	\$734.40
Net return per acre	\$567.08
Net return per acre per year . . .	\$ 81.01



A Guide to Planting for Water-Shed Protection

Correct Spacing ~

Trees are spaced the same as for reforestation except where soil erosion is anticipated, in which case four by four spacing is often advised.

How to Plant ~

Procedure in planting for Water Shed Protection is the same as for reforestation purposes. See Pages 5 and 6.

A Guide to Planting for Ornamental Purposes

Size of Trees ~

Evergreens are becoming more in favor for decorative use around homes and parks. Beautiful effects are obtained from their use, and the beauty lasts the entire year. The trees seem even more beautiful in the winter months when the rest of the landscape appears bare and drab.

Good results are obtained with four year transplants, but many people who desire immediate effect plant the larger trees. Trees five and six years old that have been twice transplanted in rows two feet apart produce well developed roots and large bushy, symmetrical tops ranging in height from 12 to 24 inches.

People of moderate means who derive enjoyment from watching trees grow find much pleasure in buying three year old transplants and growing them in their gardens for a few years. Later, when the trees have become of sufficient size, they are moved to the points desired for decoration, thereby obtaining very beautiful effects at a much lower outlay.

How to Plant ~

Ornamental Plantings are usually made in groups, or single specimen trees are placed about the lawns. The ground

for these trees should be carefully prepared. The soil should be spaded to a depth of a foot or eighteen inches, and only the finest loam used around the roots of the trees. In planting these trees, special care should be taken to have the roots well spread out and pointing downward. As the dirt is added around the roots, it should be thoroughly tamped. Most gardeners leave a slight depression around the trees and water them frequently for the first few weeks after planting.



Let Our Trained Foresters Help You

This booklet is written as a guide to the planting and care of coniferous trees. In general, it covers the important points which have to be considered in the successful raising of trees. If, however, you have a problem or question which is not thoroughly explained in this booklet, let us help you with it.

Trained foresters are employed who will gladly go over your problems with you, and give you without charge, the full benefit of their specialized training. If you are contemplating the growing of trees for commercial or for decorative purposes, you should avail yourself of this opportunity. Write the Brown Company Cupstuptic Nursery, Oquossoc, Me.

Trade Practice

Orders are subject to exhaustion of supply by error in estimate, prior sales, or losses by causes beyond our control.

Shipments are at purchaser's risk after being delivered to and accepted by the forwarding company. Claims for loss or damage in transit must be made direct to delivering company.

Claims through error must be made promptly.

Orders for less than 25 trees are sold at the piece rate; 25 to 250 trees at the hundred rate, and in lots of 250 and over at the thousand rate.

For orders accepted at thousand rate and shipped in small lots, an additional charge will be made to cover cost of packing. When orders are for less than one thousand trees, a nominal packing charge will be made.

Prices are net including packing charges, f. o. b. Oquossoc, Maine, subject to change without notice.

We exercise the greatest care to have all our stock true to name, but give no warranty, expressed or implied, as to the quality of productiveness or any other matter of any nursery stock we sell.

Upon request, special quotations will be made for large quantities of stock.

Price List is attached inside of back cover.

Price List

Fall 1928—Spring 1929

*Pinus Strobus

	Age	Size	Per M	Per C	Ea.
White Pine	3-0	3-5	3.50	.70	
White Pine	4-0	8-10	3.00	.60	
White Pine	3-1	3-7	6.00	1.20	.05
White Pine	3-2	5-10	7.00	1.40	.05
White Pine	2-3	8-12	9.00	1.80	.05

Pinus Sylvestris

Scotch Pine	2-0	—	4.00	.80	
Scotch Pine	3-0	—	4.00	.80	
Scotch Pine	2-1	2-4	9.00	1.80	.05
Scotch Pine	2-2	6-9	12.00	2.40	.05
Scotch Pine	2-4TT	12-24	250.00	35.00	.50

Pinus Resinosa

Red Pine	2-0	—	4.00	.80	
Red Pine	3-0	2-4	5.00	1.00	
Red Pine	2-1	2-5	9.00	1.80	
Red Pine	2-2	4-8	12.00	2.40	.05
Red Pine	2-3	6-12	20.00	4.00	.10

Pinus Mughus

Mugho Pine	2-2	2-4	40.00	8.00	.15
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Pinus Austriaca

Austrian Pine	2-0	—	10.00	2.00	
Austrian Pine	2-1	2-5	20.00	4.00	.10
Austrian Pine	2-2	5-10	40.00	8.00	.15

Pinus Banksiana

Jack Pine	2-0	—	4.00	.80	
Jack Pine	3-0	3-5	4.00	.80	
Jack Pine	2-2	6-12	12.00	2.40	.05

Picea Glauca

White Spruce	3-0	—	5.00	1.00	
White Spruce	2-2	4-8	16.00	3.20	.10
White Spruce	2-4TT	8-14	60.00	12.00	.40

Picea Excelsa

Norway Spruce	2-0	2-0	4.00	.80	
Norway Spruce	3-0	—	5.00	1.00	
Norway Spruce	2-1	3-5	9.00	1.80	.05
Norway Spruce	2-2	5-10	20.00	4.00	.10

Picea Pungens

Colorado Blue Spruce	2-0	—	10.00	2.00	
Colorado Blue Spruce	2-1	—	16.00	3.20	.10

Picea Engelmanni

Engelmann Spruce	2-0	—	8.00	1.60	
Engelmann Spruce	3-0	—	10.00	2.00	.05
Engelmann Spruce	2-1	2-3	16.00	3.20	.10

Abies Balsamea

Balsam Fir	2-1	—	15.00	3.00	.05
Balsam Fir	2-2	4-8	20.00	4.00	.07

Thuja Occidentalis

White Cedar or					
American Arborvitae	2-1	—	16.00	3.20	.10

Prices subject to change without notice

* White Pine can be shipped in New England only.



EAST FIELD, CUPSUPTIC NURSERY, OQUOSSOC, MAINE.